



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/461,110	12/14/1999	STAFFAN JOHANSSON	040010-585	3348

27045 7590 04/21/2005

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER

CHOJNACKI, MELLISSA M

ART UNIT PAPER NUMBER

2164

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/461,110

Applicant(s)

JOHANSSON ET AL.

Examiner

Melissa M Chojnacki

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to communications filed on January 27, 2005, claims 1-16 have been cancelled, and new claims 17-32 are added per applicant's request. Therefore, claims 17-32 are presently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiman et al. (U.S. Patent No. 5,528,621) in view of Fox (U.S. Patent No. 5,765,172).

As to claim 17, Heiman et al. teaches a method for synchronizing configuring data stored in a base station database with corresponding configuring data stored in a mobile services switching center (MSC) database (See abstract; column 4, lines 11-61), the base station database and the MSC database each being arranged in a data group or a plurality of data groups within each database (See column 2, lines 65-67; column 3, lines 1-8), the method comprising the steps of:

calculating reference checksums for each of the data groups in the base station database and the MSC database (See column 29, lines 30-37);

monitoring all base station data groups (See column 3, lines 26-42).

Heiman et al. does not teach comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database; and requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum.

Fox teaches a system and method for verifying integrity of replication databases (See abstract), in which he teaches comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database (See Fig. 8; column 1, lines 65-67; column 2, lines 1-6); and requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum (See abstract; column 5, lines 35-44; column 7, lines 65-67; column 8, lines 1-3).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Heiman et al., to include comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database; and requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Heiman et al., by the teachings of Fox because comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database; and requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum would prevent replicated distributed databases from beginning to diverge, that is, no longer contain identical data (See Fox, column 1, lines 45-57).

As to claims 18 and 26, Heiman et al. teaches subsequent to the step of calculating reference checksums, downloading the MSC data group reference checksums to the base station, wherein the reference checksum in each data group in the MSC database are calculated using the content of MSC configuring data; means for downloading the MSC data group reference checksums to the base station, wherein the reference checksum in each data group in the MSC database are calculated using the content of MSC configuring data (See Heiman et al., column 29, lines 30-37; also see Fox, Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claims 19 and 27, Heiman et al. teaches wherein the step of comparing the MSC data group reference checksums to corresponding calculated base station data group checksums is initiated upon detecting operation disturbances in the base station;

Art Unit: 2164

means for initiating comparison of the MSC data group reference checksums to the corresponding calculated base station data group checksums upon data sting operation disturbances in the base station (See Heiman et al., column 29, lines 30-37; also see Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claims 20 and 28, Heiman et al. teaches wherein the step of comparing MSC data group reference checksums to the corresponding calculated base station data group checksums further comprises repeating the comparison on a regular basis; means for repeating the comparison of the MSC data: group reference checksums to the corresponding calculated base station data group checksums on a regular basis (See Heiman et al., column 29, lines 30-37; also see Fox, Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claims 21 and 29, Heiman et al. teaches repeating the comparison on a regular basis having a predetermined times interval between each comparison; wherein the means for repeating the comparison of the MSC data group reference checksums further comprises means for repeating the comparison on a regular basis having a predetermined time interval between each comparison (See Heiman et al., column 7, lines 10-30; column 29, lines 30-37; also see Fox, Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claims 22 and 30, Heiman et al. teaches performing the comparison for each data group in the base station database, wherein an individual time interval between comparisons is predetermined for each data group; means for performing the comparison for each data group in the base station database, wherein an individual time interval between comparisons is predetermined for each data group (See Heiman et al., column 7, lines 10-30; column 29, lines 30-37; also see Fox, Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claims 23 and 31, Heiman et al. teaches performing checksum calculations of the configuring data for each base station data group; and comparing the calculated checksums to the reference checksums received from the MSC; means for performing checksum calculations of the configuring data for each base station data group; and means for comparing the calculated checksums to the MSC data group reference checksums received from the MSC (See Heiman et al., column 7, lines 10-30; column 29, lines 30-37; also see Fox, Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claims 24 and 32, Heiman et al. teaches wherein the base station data groups are classified according to the need for the content of each data group, wherein the configuring data in a data group classified as more urgent is downloaded to the base station prior to downloading configuring data in a data group classified as less urgent and copies of the MSC configuring data for each data group are downloaded as

Art Unit: 2164

needed in order according to the classification of the data grouse; means for classifying the base station data groups, wherein the base station data groups are classified according to the need of the content of each data group, wherein the configuring data in a data group classified as more urgent is downloaded to the base station prior to downloading configuring data in a data group classified as less urgent and copies of the MSC configuring data for each data group are downloaded as needed in order according to the classification of the data group (See Heiman et al., column 7, lines 10-30; column 29, lines 30-37; also see Fox, Fig. 5-8; column 1, lines 65-67; column 2, lines 1-35; column 5, lines 30-44).

As to claim 25, Heiman et al. teaches a system for synchronizing configuring data stored in a base station database with corresponding configuring data stored in a mobile services switching center (MSC) database (See abstract; column 4, lines 11-61), the base station database and the MSC database each being arranged in a data group or a plurality of data groups within each database (See column 2, lines 65-67; column 3, lines 1-8), the system comprising:

means for calculating reference checksums for each of the data groups in the base station database and the MSC database (See column 29, lines 30-37);

means for monitoring all base station data groups (See column 3, lines 26-42).

Heiman et al. does not teach comparison means for comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database; and means for requesting a

Art Unit: 2164

copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum.

Fox teaches a system and method for verifying integrity of replicated databases (See abstract), in which he teaches comparison means for comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database (See Fig. 8; column 1, lines 65-67; column 2, lines 1-6); and means for requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum (See abstract; column 5, lines 35-44; column 7, lines 65-67; column 8, lines 1-3).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Heiman et al., to include comparison means for comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database; and means for requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Heiman et al., by the teachings of Fox

because comparison means for comparing a calculated checksum of each data group in the base station database to the reference checksum of each corresponding data group in the MSC database; and means for requesting a copy of the MSC data group for which a mismatch is found, to be downloaded to the base station database upon detecting a mismatch between a data group's reference checksum and the corresponding calculated checksum would prevent replicated distributed databases from beginning to diverge, that is, no longer contain identical data (See Fox, column 1, lines 45-57).

Response to Arguments

4. Applicant's arguments filed on January 27, 2005, with respect to the rejected claims in view of the cited references have been considered but are moot in view of applicant's amended claims necessitate new ground(s) of rejection.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2164

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mellissa M Chojnacki whose telephone number is (571) 272-4076. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 15, 2005
Mmc



SAM RIMELL
PRIMARY EXAMINER